

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

IN RE: ASBESTOS PRODUCTS :  
LIABILITY LITIGATION (No. VI) : Consolidated Under  
: MDL DOCKET NO. 875  
DIANNA K. LARSON, ET AL., :  
: Plaintiffs : Case No. 09-69123  
: :  
v. : : Transferred from the  
: BONDEX INTERNATIONAL, ET AL., : Central District of Utah  
: :  
Defendants : :

M E M O R A N D U M

EDUARDO C. ROBRENO, J.

November 15, 2010

Before the Court is Defendant Georgia Pacific, LLC's Objections to Magistrate Judge Angell's Memorandum Opinion regarding Defendant's Motion to Exclude Plaintiffs' Experts' Testimony. (doc. no. 75.) Also before the Court is Plaintiffs' Objections to Magistrate Judge Angell's Memorandum Opinion regarding Plaintiffs' Motion in Limine. (doc. no. 76.) Judge Angell denied the parties' motions in limine on the grounds that all experts presented in the instant case meet the requisite standard of qualification, reliability, and fit under Federal Rule of Evidence 702 and Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).

## I. Background

Plaintiff Dianna Larson was diagnosed with mesothelioma in 2006. (Mem. Op., doc. no. 73, at 1.) Plaintiffs allege that the mesothelioma is the result of exposure to asbestos in joint compound products which Dianna Larson used in the 1970s when she and her first husband built two homes in Utah. (Id.) Named Defendants are alleged to have manufactured, sold or distributed chrysotile-containing joint compound products. (Id.)

After an initial voluntary dismissal of the action, the case was re-filed in the Third Judicial District Court, Salt Lake County, Utah, and removed to the United States District Court for the District of Utah in 2008. (Id., at 1 n.1.) The case was transferred to the Eastern District of Pennsylvania as part of MDL 875 In Re: Asbestos in June 2008. (Id.)

Dianna Larson alleges that she was exposed to Defendant's asbestos-containing joint compound products during the construction of two homes, which she and her first husband conducted with virtually no outside assistance. (Id. at 2.) Dianna Larson alleges that she was exposed when she sanded down Defendant's asbestos-containing products, used asbestos-containing sheetrock for the walls and ceilings, cleaned up the sites where Defendant's products were used, and cleaned the clothes worn by her and her husband, which contained asbestos dust. (Id. at 2.)

Both Plaintiffs and Defendants have filed motions to exclude each other's expert testimony regarding the cause of Dianna Larson's injuries under Federal Rule of Evidence 702 and 703.

## II. Standard of Review

Federal Rule of Evidence 702 sets forth the standard for admitting expert testimony. The Rule requires that an expert witness must be "qualified as an expert by knowledge, skill, experience, training, or education" may testify as to his or her opinion if "(1) the testimony is based upon sufficient facts or data (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case." Fed. R. Evid. 702. The Third Circuit has explained that "Rule 702 embodies a trilogy of restrictions on expert testimony: qualification, reliability, and fit." Schneider v. Fried, 320 F.3d 396, 404 (3d Cir. 2003) (citing Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993)).

The "reliability" of the underlying principles and methods is the basis for each parties' objection to expert testimony in the instant case. (Mem. Op., doc. no. 73, at 3.) To determine the reliability of a scientific principle or method, a court may examine numerous factors, including whether the principle or method has been tested or is capable of being tested, whether the

potential rate of error in the method can be ascertained, whether it has been subjected to peer review and publication, and whether it is generally accepted within the scientific community.

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, at 593-94. The test for reliability is "flexible," and a court has "broad latitude" in how it chooses to determine liability. Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 141 (1999). The approach to determining reliability of expert testimony is "tied to the facts" of a particular case, and highly dependent on the nature of the expert testimony presented. Id. at 148 (quoting United States v. Downing, 753 F.3d 1224, 1242 (3d Cir. 1985)).

In reviewing objections to a magistrate judge's ruling on a non-dispositive matter, a district court will only reverse a magistrate judge's decision if it "is clearly erroneous or contrary to law." Fed. Rule. Civ. P. 72(a). A magistrate judge's ruling concerning the admissibility of expert testimony is non-dispositive discovery ruling, and is therefore subject to a clearly erroneous standard of review. See, e.g., U.S. v. Polishan, 336 F.3d 234, n.2 (3d Cir. 2003) (noting that the District Court found that the Magistrate Judge's discovery rulings were not clearly erroneous).

### III. Analysis

The motions at issue, and objections to Judge Angell's

Memorandum Opinion for each, are addressed below ad seriatim.

A. Defendant Georgia Pacific LLC's Motion to Exclude  
Testimony of Plaintiff's Experts Dr. Arnold Brody and  
Dr. Jacques Legier Under Federal Rule of Evidence 702<sup>1</sup>

Defendant Georgia Pacific LLC ("Georgia Pacific") objects to the admission of Plaintiff's experts, cellular biologist Arnold Brody, Ph.D., and pathologist Jacques Legier, M.D., who testify that inhaled chrysotile fibers can cause peritoneal mesothelioma. (doc. no. 19.) Georgia Pacific argues that these opinions are not based on generally accepted scientific evidence, and are based on "fatally flawed" methodology. (Def.'s Mot., doc. no. 19, at 5.)

1. Dr. Brody's Opinion

It is Dr. Brody's opinion that all asbestos fiber varieties, including the chrysotile variety involved in the instant case, can cause asbestosis, pleural fibrosis, lung cancer, and mesothelioma. (Mem. Op. at 6) (citing "Asbestos Induced Lung Diseases" by Arnold R. Brody, Ph.D., doc. no. 19-12, at 2.) Dr. Brody supports his opinion by testifying that there are "scientific investigations on humans and correlative animal and cell studies" confirming the relationship between asbestos fibers

---

<sup>1</sup> Defendant Union Carbide joined in Georgia Pacific LLC's motion (doc. no. 24.) Defendant Bondex filed a Motion in Limine similar to Georgia Pacific LLC's (doc. no. 23.) Bondex did not object to Magistrate Judge Angell's denial of Bondex's motion, and filed a Suggestion of Bankruptcy on July 2, 2010 (doc. no. 74.)

and four asbestos-related diseases discussed. (Mem. Op. at 7; Id.) Dr. Brody included in his curriculum vitae a list of one hundred and forty-six peer reviewed publications, and approximately fifty chapters, authored or co-authored by Dr. Brody. (Mem. Op. at 7.)

Judge Angell ultimately determined that Dr. Brody's opinion was reliable, and that any concern about lack of citation to specific studies can be introduced on cross-examination, and be considered by the jury in determining the weight that should be given to his testimony. (Id. at 8.) Judge Angell noted that Dr. Brody's expert testimony at trial will be limited to "general testimony about how asbestos causes cancer and may not include any opinion as to specific causation in this case." (Mem. Op. at 6.) Plaintiffs are offering Dr. Brody's testimony to "educate the jury" about "the physiological design and function of the lungs, how asbestos fibers migrate throughout the body and are deposited in the lungs, the different types of asbestos fibers, and how all exposures to asbestos contribute to cause an individual's disease." (Pl.'s Mem., doc. no. 43, at 21.)

Defendants object to Judge Angell's finding on the basis that Dr. Brody's opinion is not based on "scientifically valid methodology," namely, that Dr. Brody did not evaluate the relevant epidemiological literature before reaching his opinions. (Def.'s Objects., doc. no. 75, at 5.) (citing Dep. of Arnold R.

Brody at 8:18-24.)<sup>2</sup> Defendants argue that the epidemiological link between certain kinds of asbestos fibers and disease processes is well-established. (Def.'s Objects., doc. no. 75, at 6-7.) Further, Defendant argues that district courts in this Circuit have held that "no reliable scientific approach can simply ignore the epidemiology that exists." (Def.'s Objects., doc. no. 75, at 8) (citing Perry v. Novartis Pharmaceuticals Corp., 564 F. Supp. 2d 452, at 465 (E.D. Pa. 2008)). Defendant asserts that Dr. Brody does not rely on any epidemiological studies and is therefore inherently unreliable. (Def.'s Objects., doc. no. 75, at 8, n.9.)

However, in Heller v. Shaw Industries, 167 F.3d 146 (3d Cir. 1999), the Third Circuit Court of Appeals emphasized the "flexible nature" of the Daubert inquiry, and held that an expert does not have to "cite published studies on general causation in order to reliably conclude that a particular object caused a particular illness." Id. at 157. Further, the Perry court noted that, "it has not been declared in [the Third Circuit] that epidemiological studies are an indispensable element in the presentation of a *prima facie* [] product liability case" but that

---

<sup>2</sup> Q: [ . . . ] Is it fair to say you have not undertaken to evaluate the epidemiological literature to determine the extent to which well-differentiated papillary mesothelioma has been associated with asbestos exposure?

A: Correct.

"epidemiology is the primary generally accepted methodology for demonstrating a causal relation between a chemical compound and a set of symptoms or disease." Perry, 564 F. Supp. 2d at 465 (internal citations omitted).

Dr. Brody may not have relied on epidemiological studies, but his expert opinion is not without a reliable basis. Judge Angell noted that Dr. Brody relied on one hundred and forty-six peer-reviewed publications of which he is an author or co-author, and many of these articles relate to the effects of chrysotile fibers on a molecular level. (Mem. Op., doc. no. 73, at 7.) These articles include, but are not limited to: Chrysotile asbestos inhalation in rats: deposition pattern and reaction of alveolar epithelium, and pulmonary macrophages. (doc. no. 19-2, at p. 13, article no. 32); Interstitial accumulation of inhaled chrysotile asbestos fibers and consequent formation of microcalcifications (Id., article no. 34); Characterization of three types of chrysotile asbestos after aerosolization (Id., article no. 42); Chrysotile asbestos inhalation induces tritiated thymidine incorporation by epithelial cells of distal bronchioles (Id., article no. 78.); see also article nos. 93, 102.

Given the purpose of Dr. Brody's testimony, to assist the jury in understanding the relationship between exposure to asbestos fibers and disease processes generally, and the breadth of peer-reviewed publications relied on, this Court will not

disturb Judge Angell's finding that Plaintiff has met the reliability requirement of Rule 702 and Daubert.<sup>3</sup>

## 2. Dr. Legier's Opinion

Dr. Jacques Legier will offer testimony that "[t]he consensus of the medical and scientific community supports the conclusion that both pleural and peritoneal mesothelioma are signature diseases caused by exposure to asbestos, including chrysotile asbestos." (Mem. Op. at 11) (citing Supplemental Expert Report of Jacques Legier, M.D., doc. no. 19-7, at 2.) In support of his opinion, Dr. Legier cites, inter alia, peer-reviewed medical literature, case reports of individuals who were exposed to chrysotile fibers and developed peritoneal mesothelioma, and fiber migration studies showing that chrysotile fibers have the capacity to cause malignant changes in the mesothelial cells. (Id.)

Judge Angell rejected Defendant's argument that Dr. Legier's

---

<sup>3</sup> This Court recently admitted the testimony of Dr. Brody regarding general causation in an asbestos personal injury trial before Judge Robreno. See Schumacher v. Amtico, Docket No. 10-01627 (E.D. Pa. 2010). Just as in the instant case, Dr. Brody was offered to assist the jury in understanding the mesothelioma disease process generally. Though his opinion that every exposure to asbestos is a cause of the disease is subject to a bona-fide debate in the scientific community, and could even be called "shaky" by some, the Court, in its gatekeeping role, found that Dr. Brody's opinion satisfied the three Daubert requirements and allowed the jury to hear his testimony.

opinion is unreliable because the scientific methods he cites "have been used in incomplete and misleading ways" and "ignor[es] relevant epidemiological studies." (Mem. Op. at 12) (citing Def.'s Mot., at 16-17.) Judge Angell found that first, epidemiology studies are not *per se* required. (Mem. Op. at 12) (citing Heller v. Shaw Industries, 167 F.3d at 155-56 (3d Cir. 1999)). Further, Dr. Legier's report does not ignore epidemiological studies, rather, the studies he relies on are contrary to the studies which Defendant's expert relies on. (Id.)

Defendants object to Judge Angell's findings on the ground that Dr. Legier "fail[s] to consider the available epidemiology" and that he "rejects[s] well-accepted statements in the scientific literature." (Def.'s Objects., doc. no. 75, at 10.) Further, Defendants argue that Dr. Legier's differential diagnosis is fatally flawed because he did not consider a potential idiopathic origin to Ms. Larson's disease. (Id. at 11.)

First, Dr. Legier's report relies on numerous epidemiological studies, including, but not limited to, Consensus Report (Helsinki Criteria) Scandinavian Journal of Work and Environmental Health 1992; 311-316 at 313 (Dr. Legier Rep., doc. no. 19-15, at 4) and noted epidemiologist Paolo Boffeta's

Epidemiology of Peritoneal Mesothelioma: a Review (Id. at 6.)

Further, the sources that Dr. Legier relies on are based on findings from numerous epidemiological studies. Defendants are free to challenge the specific epidemiological studies, and the way in which Dr. Legier interprets them, at trial.

Second, regarding Dr. Legier's alleged failure to consider an idiopathic origin, the Third Circuit Court of Appeals has explicitly held that an expert's opinion should not be excluded because "he or she has failed to rule out every possible alternative cause of a plaintiff's illness." Heller at 155, 156. Rather, "[s]uggested alternative causes" of the injury "affect the weight that the jury should give the expert's testimony and not the admissibility of that testimony." Id. at 157.

Under these circumstances, Dr. Legier's report satisfies the reliability requirement of Rule 702 and Daubert.

B. Plaintiffs' Motion In Limine to Exclude or Limit Dr. Dyson's Dose Reconstruction Testimony Pursuant To Daubert and Rules 702 and 703 of the Federal Rules of Evidence (doc. no. 20)

Dr. Dyson is prepared to testify at trial that Dianna Larson's "exposure dose from the use of all drywall joint compounds in the construction of her first home is likely to have been on the order of 0.3 fib\*yr/cc or less." (doc. no. 20-3, at 5.) Dr. Dyson asserts that this is "very low" and comparable to an individual's exposure in an urban environment breathing ambient

air over a seventy-year lifetime. (Id.) Plaintiffs object to Defendants' expert, Dr. William L. Dyson's "dose recreation" testimony, on the grounds that it fails to satisfy Daubert's standard of relevance and reliability, and further argue that there is not a good fit between this methodology and the facts of the instant case. (Pl.'s Objects., doc. no. 76-1, at 6.)

Judge Angell determined that Dr. Dyson's testimony meets the "fit" requirement, as it "aid[s] the jury in resolving [the] factual dispute" of whether Defendants' products caused Plaintiff's injury in the instant case. (Mem. Op. at 15) (quoting Meadows v. Anchor Longwall, 306 Fed. Appx. 781, 790 (3d Cir. 2009) (internal citations omitted)). Judge Angell further found that Dr. Dyson's testimony was reliable, as he used "his knowledge and experience, [and] applied an accepted methodology to information garnered from Ms. Larson's medical records, deposition testimony and answers to discovery requests, and reached conclusions that reliably flow from the available data and methodology." (Mem. Op. at 15.)

Under these circumstances, this Court will not disturb Judge Angell's findings that Dr. Dyson meets the reliability and fit requirements of Rule 702 and Daubert.

C. Plaintiffs' Motion in Limine to Exclude or Limit all Testimony Regarding Quantification of Exposure (doc. no. 25)

Plaintiffs have moved to exclude testimony from any of Defendants' expert regarding the following matters:

(1) the quantification of asbestos fiber potency, including any opinions made in reliance on the risk assessment of Hodgson and Darton, one of the various iterations of the Berman & Crump risk assessment, or the similar Brattin & Crump quantitative risk assessment model; (2) the alleged inability of chrysotile asbestos to cause pleural or peritoneal mesothelioma; and (3) that there is any "safe level" or "threshold dose" of asbestos exposure, below which such exposures cannot cause mesothelioma. (Mem. Op., doc. no. 73, at 16, quoting Pl.'s Reply, doc. no. 56, at 18.)

Plaintiffs assert that the above conclusions and calculations lack reliability and general acceptance in the scientific community. (Mem. Op., doc. no. 73, at 16; Pl.'s Reply, doc. no. 56, at 5-22.)

Judge Angell determined that Defendant's experts "used valid scientific methodology, citing to peer-reviewed scientific studies, in reaching their conclusions . . . ." (Mem. Op. at 17.) Judge Angell characterized Plaintiffs' Motion in Limine as an attack on the credibility of Defendants' experts, which is appropriate for trial, but not grounds for exclusion under Daubert. (Mem. Op. at 17) (citing Kannakeril v. Terminix International, Inc., 128 F.3d 802, 806 (3d Cir. 1997) ("Admissibility decisions focus on the expert's methods and reasoning; credibility decisions arise after admissibility has been determined.")).

Under these circumstances, this Court will not disturb Judge Angell's findings that the above expert opinions meet the reliability and fit requirements of Rule 702 and Daubert.

#### IV. Conclusion

For the above stated reasons, Defendant Georgia Pacific, LLC's Objections to Magistrate Judge Angell's Order Denying Motion to Exclude Plaintiffs' Experts' Testimony are overruled. Plaintiffs' Objections to Judge Angell's Order Denying Defendants' Experts' Testimony are overruled. An appropriate order follows.